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Title: DIELECTRIC STRUCTURES

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### REMARKS

This paper responds to the Office Action mailed on February 14, 2008.

Claims 1, 8, 12, 13, 52, 62, 63 and 67 are amended, no claims are canceled, and no claims are added. Accordingly, claims 1-13, 52-53 and 60-70 remain pending in this application.

# §101 Rejection of the Claims

Claims 1-13, 52-53 and 60-70 were rejected under 35 U.S.C. § 101 as allegedly impermissibly embracing different statutory classes of invention. Specifically, the Examiner asserts that the affected claims recite a semiconductor device and processes of manufacturing a semiconductor device. Although Applicant disagrees with the stated grounds of rejection, and maintains that the identified claims do not impermissibly embrace different statutory classes of invention, claims 1, 8, 12, 13, 52, 62, 63 and 67 are nevertheless amended. It is understood that the foregoing amendments are offered merely to provide additional clarity to the claims, and not for any other reason.

Accordingly, Applicant submits that the rejection of claims 1-13, 52-53 and 60-70 under 35 U.S.C. 8101 should be removed.

#### §112 Rejection of the Claims

Claims 1, 8, 12, 13, 52, 62, 63 and 67 were rejected under 35 U.S.C. §112, second paragraph, as allegedly being directed to both a semiconductor device and a method of manufacturing a semiconductor device, which allegedly prevents a determination of the scope of the claims. Claims 1, 8, 12, 13, 52, 62, 63 and 67 were also rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. In particular, the Examiner alleges that claim 1 presently recites that: "...the common metal does not diffuse from the support surface and into the plurality of high-K dielectric layers".

Applicants submit that the present amendments to claims 1, 8, 12, 13, 52, 62, 63 and 67 overcome the Examiner's rejections under 35 U.S.C.§112 second paragraph, and 35 U.S.C.§112 second paragraph. With regard in particular to the rejections under 35

U.S.C.§112 first paragraph, Applicants submit that the claims are presently fully described by the written specification. The Examiner is referred, inter-alia, to paragraph [0025], which characterizes a particular shortcoming present in the prior art: "...oxygen may reach other layers under the conductive layer 20 and create undesirable effects in other materials." (Emphasis added). As a consequence, paragraph [0026] further provides that: "...the present invention offers exemplary embodiments that allow for formation of a high-K dielectric under conditions minimize if not completely prevent oxidation beyond the dielectric...". (Emphasis added). Still other portions of the present specification may be cited that provide a written description of the various embodiments. For example, paragraph [0036] of the present specification clearly provides support for the present amendments. Accordingly, Applicants respectfully request that the rejections under 35 U.S.C.§112 first paragraph, and 35 U.S.C.§112 second paragraph be withdrawn.

# Reservation of Rights

In the interest of clarity and brevity, Applicant may not have addressed every assertion made in the Office Action. Applicant's silence regarding any such assertion does not constitute any admission or acquiescence. Applicant reserves all rights not exercised in connection with this response, such as the right to challenge or rebut any tacit or explicit characterization of any reference or of any of the present claims, the right to challenge or rebut any asserted factual or legal basis of any of the rejections, the right to swear behind any cited reference such as provided under 37 C.F.R. § 1.131 or otherwise, or the right to assert co-ownership of any cited reference. Applicant does not admit that any of the cited references or any other references of record is relevant to the present claims, or that they constitute prior art. To the extent that any rejection or assertion is based upon the Examiner's personal knowledge, rather than any objective evidence of record as manifested by a cited prior art reference, Applicant timely objects to such reliance on Official Notice, and reserves all rights to request that the Examiner provide a reference or affidavit in support of such assertion, as required by MPEP § 2144.03. Applicant reserves all rights to pursue any cancelled claims in a subsequent

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patent application claiming the benefit of priority of the present patent application, and to request rejoinder of any withdrawn claim, as required by MPEP § 821.04.

#### CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 349-9587 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date 10/1/1/1/06

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CERTIFICATE UNDER 37 CFR. 18: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop AF. Commissioner of Patents, P.O. Box 1450. Alexandria. VA 22313-1450 on this 10th day of April 2008.

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